

a' -- min. The pull through reaction is a PCR that uses primers which are at the extreme ends of the two DNA fragments being annealed in the assembly reaction. In this way, full length assembled product is amplified from the fragment mixture. An assembled product of the expected size (1.1 kb) was produced and gel purified. This product can be used directly as starting template for a coupled *in vitro* translation/transcription reaction.

Primers used (all written 5'-3'):

PEU (SEQ ID NO: 2)

AA TTC TAA TAC GAC TCA CTA TAG GGA GAG CAC TTC TGA TCC AGT CCG ACT
GAG AAG GAA GGC CCA GCC GGC CAT GG

HA TAG (SEQ ID NO: 3)

TAC CCG TAT GAC GTG CCG GAT TAC GCA

T7 (SEQ ID NO: 4)

TAA TAC GAC TCA CTA TAG GGA GAG CAC TTC TG

HA mini (SEQ ID NO: 5)

TGC GTA ATC CGG CAC

Mycseq 10 (SEQ ID NO: 6)

CTC TTC TGA GAT GAG TTT TTG

Hismyc back (SEQ ID NO: 7)

GCA CAT CAT CAT CAC CAT CAC GGG GCC

c) Characterisation of the PCR assembled library on the basis of scFv expression

The scFv repertoire assembled with a glycine-serine tether was--

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At page 32 on lines 22-31, kindly replace paragraphs 3 and 4 with the following rewritten paragraphs:

a²
--HA-OAS 1 (135mer) (5'-3') (SEQ ID NO: 8):

TGC GTA ATC CGG CAC GTC ATA CGG GTA ACT ATT TTT CCC TTT GCG GAC
ATC ACT CTT TTT TCC GGT TCG AGA TCG AAA CTT TGC AAG CCT GAT CGA CAT
AGG GAC ATC TTC CAT GAA CTC ATC AAC GAC TTC TTC

HA-OAS 2 (no stop) (144mer) (5'-3') (SEQ ID NO: 9):

GAA CTC ATC AAC GAC TTC TTC TGT AAG TTC CAT GGG CCC TCC GTC TCT CAC
GTT TGT AAT CTT CTC TCT CAA ACC ATT CAG ATC CTC TTC TGA GAT GAG TTT
TTG TTC TGC GGC CCC GTG ATG GTG ATG ATG ATG TCG GGC CGC--

At page 33, at line 6, kindly replace paragraph 2 with the following rewritten paragraph:

a³
--HA-OAS 2 stop (5'-3') (SEQ ID NO: 10):

GAA CTC ATC AAC GAC TTC TTC TGT AAG TTC CAT GGG CCC TCC GTC TCT CAC
GTT TGT AAT CTT CTC TCT CAA ACC CTA ATT CAG ATC CTC TTC TGA GAT GAG
TTT TTG TTC TGC GGC CCC GTG ATG GTG ATG ATG ATG TCG GGC CGC--

At page 36, at lines 12-24, kindly replace paragraphs 3 and 4 with the following rewritten paragraphs:

a⁴
--The MVD1 replication site includes 63 nucleotides at the 5' end of the construct as follows (5'-3'): GGGGACCCCCCGGAAGGGGGGACGAGGTGCGGGCACCTCGTACGGGAG TTCGACCGTGACG (SEQ ID NO: 11).

Cont
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This 63 nucleotide segment is then followed by the expression unit containing the scFv gene segments, detection and purification tags, the TMV OAS sequence if required and a tether. The 3' end of the construct then includes the 3' MDV sequence that is 156 nucleotides long as follows (5'-3'):CACGGGCTAGCGCTTTCGCGCTCTCCCAGGTGACGCCTCGTGAA GAGGCGCGACCTTCGTGCGTTTCGGTGACGCACGAGAACCGCCACGCTGCTTCGC AGCGTGGCTCCTTCGCGCAGCCCGCTGCGCGAGGTGACCCCCCGAAGGGGGGGTTC CC (SEQ ID NO: 12).--

Kindly replace page 37, with the following rewritten page:

(5'-3').

AS

GGGGACCCCCCGGAAGGGGGGGACGAGGTGCGGGCACCTCGTACGGGAGTTCG ACCGTGACGAATTCTAATACGACTCACTATAG (SEQ ID NO: 13)

MDV2: HA detection tag (bold face) followed by the first 79 nucleotides of the 3' segment of the MDV RNA.

Sense

TACCCGTATGACGTGCCGGATTACGCACACGGGCTAGCGCTTTCGCGCTCTCCCAG GTGACGCCTCGTGAAGAGGCGCGACCTTCGTGCGTTTCGGTGACGCACGA (SEQ ID NO: 14)

Reverse complement (5'-3')

TCGTGCGTCACCGAAACGCACGAAGGTGCGGCCTCTTCACGAGGCGTCACCTGGG AGAGCGCGAAAGCGCTAGCCCGTGTGCGTAATCCGGCACGTCATACGGGTA (SEQ ID NO: 15)

MVD3: Remaining 77 nucleotides of the 3' MDV segment within an additional 19 nucleotide overlap (bold face) with MDV2 to allow assembly.

Sense

GCGTTTCGGTGACGCACGAGAACCGCCACGCTGCTTCGCAGCGTGGCTCCTTCGCG
CAGCCCGCTGCGCGAGGTGACCCCCCGAAGGGGGGTTCCC (SEQ ID NO: 16)

Reverse complement

GGGAACCCCCCTTCGGGGGGTACCTCGCGCAGCGGGCTGCGCGAAGGAGCCACG
CTGCGAAGCAGCGTGGCGGTTCTCGTGCGTCACCGAAACGC (SEQ ID NO: 17)

b) Assembly conditions --

At page 42, lines 2 and 3, kindly replace both lines with the following:

--VH CDR3 NMVRGVGRYYYYMDV (SEQ ID NO: 18)

VL CDR3 CSRDSSGYHLV (SEQ ID NO: 19)--

At page 42, lines 20-23, kindly replace paragraphs 6 and 7 with the following
rewritten paragraphs:

--The VH CDR3 of the parent had the following sequence: VHNGWYALEY (SEQ ID NO:
20).

The VL CDR3 of the parent had the following sequence: NSWSSGNHVV (SEQ ID NO:
21).--

At page 42, lines 31-33, kindly replace paragraphs 10 and 11 with the following
rewritten paragraphs:

--Library H4 (VH CDR3) VHNXXXXXEY (SEQ ID NO: 22)

Library L4 (VL CDR3) NSWXXXXXHV (SEQ ID NO: 23)--